REMARKS

Reconsideration of this application, as amended, is respectfully requested.

Claims 1-20, 69-88, 137-139, 141-142, and 145 are pending. Claims 1-20, 69-88, 137-139, 141-142, and 145 stand rejected.

Claims 1-3, 7, 10-12, 14-16, 19-20, 69-71, 75, 77-80, 83-84, 87-88, 137-139, 141-142, 145 have been amended. Claim 9 has been canceled. No claims have been added. Support for the amendments is found in the specification, the drawings, and in the claims as originally filed. Applicants submit that the amendments do not add new matter.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-6, 10-13, 15-16, 19-20, 69-74, 78-81, 83-84, 137-139, 141-142 and 145 stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,629,138 of Lambert, et al. ("Lambert") in view of U.S. Patent No. 6,546,421 of Wynblatt, et al. ("Wynblatt"). The Examiner stated that

> Lambert reference does not explicitly disclose,
>
> transmitting a request for data associated with said streaming media data, said request including an identifier which represents one of several possible types of data associated with said streaming media
>
> receiving said data associated with said streaming media data

(p. 6-7, Office Action 05/13/04)

Lambert discloses a method and apparatus for storing and delivering documents on the Internet. More specifically, Lambert discloses

> The presently claimed invention consists of three major components: the content bar, caching server and back-end server, as illustrated in FIG. 2. The content bar 302 and the caching server 304 reside on one or more end-user computers 100 ("client machines") owned by information subscribers. The back-end server 350 resides on one or more server-class computers owned by information publishers ("back-end server machines"). The content bar 302 and caching server 304 are logical components. Each component can be implemented as separate processes or within a single process.

> The client machines 100 and the back-end server machines communicate over a network such as the Internet or a corporate intranet. The communication mechanism includes open standard protocols such as HTTP (Hypertext Transfer Protocol), MIME (Multipurpose Internet Mail Extensions) and TCP/IP (Transmission Control Protocol/Internet Protocol)...
>
> ...In this embodiment, each caching server 304 is implemented as a standard HTTP proxy server...Fig. 3 illustrates an overview of how three components... interact with each other. A subscriber's requests to retrieve certain published content are managed by subscription manager 306, which resides on the subscriber's client machine. Subscription manager 306 communicates with Web browser 100 on the client machine to demand the requested content. Web browser 100 then sends an HTTP request to a remote caching server 304. In response, caching server 304 either retrieves cached content from cache 300 or sends an HTTP request via the Internet to a publisher's machine to retrieve non-cached content.

(Col.5, line 28 to col. 6, line 12) (emphasis added)

Unlike the presently claimed subject matter, Lambert merely discloses storing and delivering documents using HTTP, MIME and TCP/IP protocols and fails to disclose transmitting a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and receiving one or more RTP extensions associated with said streaming media data, as recited in amended claim 1:

> A method of producing a representation of a streaming media data at a caching proxy server, said method comprising:
>
> transmitting a request for streaming media data to be delivered to said caching proxy server;
>
> transmitting a request for one or more Real-Time Protocol ("RTP") extensions associated with said streaming media data, wherein each RTP extension represents a type of data that is used for performing a particular data transmission operation;
>
> receiving said streaming media data and storing said streaming media data on a storage device which is capable of being controlled by said caching proxy server; and
>
> receiving said one or more RTP extensions associated with said streaming media data.

(Amended claim 1) (emphasis added)

The Examiner noted that Wynblatt discloses a method that sends HTTP requests for "descriptive pages" from the descriptive servers to convey information about the content of one

or more corresponding data streams on the data stream servers. More specifically, Wynblatt discloses that

> Referring now to FIG. 2, a diagram illustrates a system for providing continuous automatic selection of user-preferred data streams from remote servers in accordance with an embodiment of the present invention. The system 100 comprises one or more data stream servers 110 having various data streams that are accessible by a local computer 115, for example, over the Internet 113 using RTSP and similar protocols known by those skilled in the art. The system 100 also comprises one or more "descriptive" servers 111 (e.g., WWW (World Wide Web) servers) each having "descriptive pages" (e.g., WWW documents). In an exemplary embodiment, the descriptive pages may be static documents in HTML (Hypertext Markup Language) format, documents in XML (Extensible Markup Language) format, documents that are dynamically generated via CGI (Common Gateway Interface) or ASP (Active Server Page) applications, or any other type of structured web document. As explained in greater detail below, the descriptive pages are used for conveying information regarding the content of one or more corresponding data streams of the data stream servers 110.Each descriptive page is assigned, e.g., a URL (Uniform Resource Locator) which serves to indicate the location of the document (i.e., the document's address). Using the URLs, the descriptive pages of the descriptive servers 111 can be accessed via the local computer 115 through HTTP (Hypertext Transfer Protocol).

(Col. 2, lines 54-62) (emphasis added)

Significantly, Wynblatt discloses

> Referring again to Fig. 3, after the data source addresses are downloaded (steps 301 and 302), the client program 116 uses such addresses to send HTTP requests to download descriptive pages from the descriptive servers 111 (step 303). As explained above, the descriptive pages serve to convey information about the content of one or more corresponding data streams on the data stream servers 110. This "descriptive" information can either be in a complex format or in a format as simple as a title or description of the current content of the data stream. In any event, it is preferred that such information (of the descriptive pages) be provided in a compatible predefined format, so that client program116 can readily extract the relevant information from the descriptive page after it is downloaded. It is to be understood that descriptive pages could also comprise extraneous information, as long as relevant information is recognizable by the client program 116.

(Col.4, line 54 to col.5, line 4) (emphasis added)

Further, Wynblatt discloses that

> Once the most preferred data stream has been selected (based on the scores computed from the Value Function) (step 304), the client program 116 initiates a connection to the corresponding data stream server 110 and requests the data stream (step 305) (if a different data stream was previously opened, it is closed at this time). In particular, the

> client 116 and server 111 establish a streaming connection using a standard protocol such as RTSP. Once the streaming connection is established, the client 116 begins receiving data and processing the data, which is then output by the local computer 115 as appropriate for the given application. For example, the received data is processed by the client program 116 and output for the user as audio. In other applications, the data stream may be processed and output in both video and audio.

(Col.7, lines 17-31) (emphasis added)

Thus, Wynblatt merely discloses sending HTTP requests for descriptive pages from the descriptive servers to convey information about the content of corresponding data streams on the data servers, selecting a preferred data stream by comparing the descriptive information on the descriptive pages with user preferences and then establishing a streaming connection between a client and a server using a standard protocol such as RTSP. Wynblatt, similar to Lambert, fails to disclose, teach, or suggest transmitting a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and receiving one or more RTP extensions associated with said streaming media data, as recited in amended claim 1.

Bushmitch discloses the Reliable protocol to reconstruct an entire data block, including missing or lost data packets, from the individual data packets and the Best Feasible protocol that sacrifices some of the data packet's reliability by not retransmitting "late" data packets. More specifically, Bushmitch discloses

> Each transmittal of a data block in a media delivery system is realized as a succession of data packets during a data block transmittal cycle. A session is called active if it is in a data block transmittal cycle. Typically, a data block is set at 1MB, but may vary for different stream types. A format for each data packet (i.e., RTP payloads) in the real-time protocols of the present invention is shown in FIG. 5. The fields in the real-time header portion of the data packet are consistent with RTP header format, including version, padding, extension, count of contributing sources (usually set at zero), payload type (set to 77), and payload sequence number. The payload sequence number will be reset at the beginning of each data block transmittal cycle. The time reference used to timestamp data packets is also reset to zero at the beginning of each cycle and incremented linearly in 1/65535 second long ticks. Data packets are in turn sent to the receiver at the rate of 1/T.sub.send, where T.sub.send is a programmatic parameter passed to the application's protocol communication function.

(Bushmitch, col. 4, line 63- col.5, line 14) (emphasis added)

Further, Bushmitch discloses that the header extension area of the data packet is used to transmit a unique synchronization source identifier ("SSRC") that includes both the sender and the intended recipient identifiers. In particular, Bushmitch discloses

> The header extension area of the data packet is used to transmit the logical SSRC. The SSRC field of the header portion contains the thread index portion (32-bit) of the Object ID for the sender entity. By setting extension field to one, the header extension area carries the remaining part of the logical SSRC. This remaining part includes the 32-bit IP address of sender entity and the Object ID (64-bit) for receiver entity which is put into the extension header of the data packet. While the above described RTP-based data packets are used for stream-specific data transmittal, application specific standard RTCP messages (as described below) are used for session management, flow control, error correction and other system functions in the media delivery system.

(Col. 5, lines 15-28) (emphasis added)

Significantly, Bushmitch discloses that

> During the course of an RTP session, RTCP sender/receiver reports are periodically exchanged between the sender and receiver. By using this same RTCP reporting mechanism, the Best Feasible protocol of the present invention is able to determine an estimated RTT for each active receiver. FIGS. 8 and 9 illustrate the format of RTCP Sender (SNDR) report and RTCP Receiver (RCVR) report, respectively. Sender encapsulates its RTP time reference (in clock ticks) in the RTP timestamp of an RTCP sender's report. Upon reception of RTCP sender report, receiver immediately replies with an RTCP receiver report. The receiver encapsulates the received timestamp from the sender's report in the time of last sender report field of RTCP receiver report. When the sender receives this receiver's report it can easily determine how many RTP clock ticks have elapsed since the last sender's report, and therefore estimate in RTP ticks a value for RTT.

(Col. 7, lines 40-55) (emphasis added)

Bushmitch, in contrast to the presently claimed subject matter, merely discloses that the header portion of the data packet is consistent with RTP header format including version, padding, extension, count of contributing sources, payload type, and payload sequence number fields, wherein the header's extension field contains the receiver and sender identifiers. To timestamp data packets, Bushmitch, unlike the presently claimed subject matter, uses the time

reference, which is encapsulated into the Real Time Control Protocol report ("RTCP"), wherein data packets are sent to the receiver at the predetermined rate of $1/T_{send}$. Bushmitch, similar to Lambert and Wynblatt, also fails to disclose, teach, or suggest transmitting a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and receiving one or more RTP extensions associated with said streaming media data, as recited in amended claim 1.

Hence, none of Lambert, Wynblatt, or Bushmitch disclose, teach, or suggest transmitting a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and receiving one or more RTP extensions associated with said streaming media data, as recited in amended claim 1.

Consequently, even if Lambert, Wynblatt, and Bushmitch were combined, such a combination would lack the limitation of claim 1 of transmitting a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and receiving one or more RTP extensions associated with said streaming media data.

Therefore, applicants respectfully submit that amended claim 1 is not obvious under 35 U.S.C. § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claims 12, 69, 137 and 142 contain limitations substantially similar to limitations of amended claim 1. Therefore, applicants respectfully submit that amended claims 12, 69, 137 and 142, for at least the same reasons as advanced above, are not obvious under 35 U.S.C § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Given that claims 2, 13-20, and 70 depend, either directly or indirectly, on respective claims 1, 12 and 69 and add additional limitations, applicants respectfully submit that claims 2, 13-20 and 70 are likewise not obvious under 35 U.S.C. §103 (a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claim 3 reads as follows:

> A method for data transmission from a server data processing system, said method comprising:
>
> receiving a request for streaming media data, said request including a request for one or more Real-Time Protocol ("RTP") extensions associated with said streaming media data, wherein each RTP extension represents a type of data that is used for performing a particular data transmission operation;
>
> responding to the request with a response indicating a capability of the server to support the request; and
>
> sending the requested one or more RTP extensions associated with said streaming media data.

(Amended claim 3) (emphasis added)

As set forth above, none of Lambert, Wynblatt, or Bushmitch disclose, teach, or suggest receiving a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and sending one or more RTP extensions associated with streaming media data, as recited in amended claim 3.

Consequently, even if Lambert, Wynblatt, and Bushmitch were combined, such a combination would lack the limitation of claim 3 of receiving a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and sending one or more RTP extensions associated with streaming media data.

Therefore, applicants respectfully submit that amended claim 3 is not obvious under 35 U.S.C. § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claims 71 and 138 contain limitations similar to limitations of amended claim 3. Therefore, applicants respectfully submit that amended claims 71 and 138, for at least the same reasons as advanced above, are not obvious under 35 U.S.C § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Given that claims 4-11 and 72-79 depend, either directly or indirectly, on respective claims 3 and 71 and add additional limitations, applicants respectfully submit that claims 4-11 and 72-79 are likewise not obvious under 35 U.S.C. §103 (a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claim 80 reads as follows:

> A machine-readable medium that provides executable instructions, which when executed by a set of processors, cause said set of processors to perform data transmission receiving operations from a server comprising:
>
> sending a request for streaming media data to said server, said request including a request for one or more Real-Time Protocol ("RTP") extensions associated with said streaming media data, wherein each RTP extension represents a type of data that is used for performing a particular data transmission operation;
>
> receiving a response from said server indicating support for the requested streaming media data;
>
> informing said server to send the streaming media data supported by RTP extensions associated with said streaming media data;
>
> receiving the supported streaming media data from said server;
>
> receiving a request from a client to send streaming media data; and
>
> sending the requested streaming media data to said client.

(Amended claim 80) (emphasis added)

As set forth above, none of Lambert, Wynblatt, or Bushmitch disclose, teach, or suggest sending a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and informing the server to send the streaming media data supported by RTP extensions associated with the streaming media data, as recited in amended claim 80.

Consequently, even if Lambert, Wynblatt, and Bushmitch were combined, such a combination would lack the limitation of claim 80 of sending a request for one or more RTP

extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and informing the server to send the streaming media data supported by RTP extensions associated with the streaming media data. Therefore, applicants respectfully submit that amended claim 80 is not obvious under 35 U.S.C. § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Given that claims 81-88 depend, either directly or indirectly, on claim 80 and add additional limitations, applicants respectfully submit that claims 81-88 are likewise not obvious under 35 U.S.C. §103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claim 139 contains limitations similar to limitations of amended claim 80. Therefore, applicants respectfully submit that amended claim 139, for at least the same reasons as advanced above, is not obvious under 35 U.S.C § 10 (a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claim 141 reads as follows:

> A server comprising:
> means for receiving a request for streaming media data from a caching proxy server or a client, said request including a request for one or more Real-Time Protocol ("RTP") extensions associated with said streaming media data, wherein each RTP extension represents a type of data that is used for performing a particular data transmission operation;
> means for determining if requested types of RTP extensions associated with said streaming media data are supported by the server; and
> means for responding to the request with a response indicating the capability of the server to support the request.

(Amended claim 141) (emphasis added)

As set forth above, none of Lambert, Wynblatt, or Bushmitch disclose, teach, or suggest means for receiving a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and means for determining if requested types of RTP

extensions associated with the streaming media data are supported by the server, as recited in amended claim 141.

Consequently, even if Lambert, Wynblatt, and Bushmitch were combined, such a combination would lack the limitation of claim 141 of means for receiving a request for one or more RTP extensions associated with streaming media data, wherein each of the RTP extensions represents a type of data that is used to perform a particular data transmission operation and means for determining if requested types of RTP extensions associated with the streaming media data are supported by the server. Therefore, applicants respectfully submit that amended claim 141 is not obvious under 35 U.S.C. § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

Amended claim 145 reads as follows:

A caching proxy server comprising:
means for requesting transmit time Real-Time Protocol ("RTP") extensions for streaming media data from a server;
means for receiving said streaming media data and corresponding transmit time RTP extensions from the server;
means for storing the received information; and
means for transmitting from said caching proxy server to a client said streaming media data at times specified by said transmit time RTP extensions.

(Amended claim 145) (emphasis added)

As set forth above, contrary to the Examiner's assertion, the time reference of Bushmitch is encapsulated into the Real Time Control Protocol report ("RTCP") and not into the RTP extension, as recited in amended claim 145.

As also set forth above, Bushmitch, similar to Lambert and Wynblatt, fails to disclose, teach, or suggest means for requesting transmit time RTP extensions for streaming media data, means for receiving corresponding transmit time RTP extensions, and means for transmitting the streaming media data at times specified by the transmit time RTP extensions, as recited in amended claim 145.

Consequently, even if Lambert, Wynblatt, and Bushmitch were combined, such a combination would lack the limitation of claim 145 of means for requesting transmit time RTP extensions for streaming media data, means for receiving corresponding transmit time RTP extensions, and means for transmitting the streaming media data at times specified by the transmit time RTP extensions. Therefore, applicants respectfully submit that amended claim 145 is not obvious under 35 U.S.C. § 103(a) over Lambert in view of Wynblatt, and further in view of Bushmitch.

It is respectfully submitted that in view of the amendments and arguments set forth herein, the applicable rejections and objections have been overcome. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: Aug. 13, 2004 By: _____

James C. Scheller
Reg. No. 31,195

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(408) 720-8300